



**Environmental Reevaluation
REVISED LIMITED INITIAL SITE ASSESSMENT
OF KNOWN AND SUSPECTED CONTAMINATED SITES ON THE
NORTH SPOKANE CORRIDOR
FRANCIS AVE TO SPOKANE RIVER**

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Scope

Re-design of the portion of the North Spokane Freeway Corridor alignment as shown in the Final EIS (FEIS), between the Francis Avenue Interchange and the Spokane River, has created the need to re-evaluate the Hazardous Materials impacts to this project. The revised alignment is near the same footprint as that shown in the FEIS with the exception of changes required by railroad re-alignment and the profiles of the roadway design and rail have changed. The profile moves from primarily sub-grade to above existing. The orientations of the roadway and the railroad have also switched sides of the corridor. This was necessary primarily because of the restrictions of rail engineering and the necessity of maintaining service to their customers

The original design generally had the roadway alignment profiled at between twenty-five and thirty feet below existing grade. This massive excavation created the need to deal with a large quantity of soil that has been categorized as contaminated to various extents. The proposed re-design generally changes the profile to 10 feet above existing grade and precludes excavating most of these soils. The realignment does impact a few additional commercial parcels as well as residential parcels that were not discussed in the original FEIS and will be discussed here.

Affected Environment

Several changes since the FEIS, including both regulatory and this proposed modification from the original design greatly reduce the contaminated soil handling requirements, quantities and therefore costs involved in this project segment:

- 1) The re-design of the rail and roadway profiles result in a large total net decrease to hazardous materials impacts by avoidance.
- 2) Changes in regulatory cleanup levels for heavy petroleum hydrocarbons have substantially reduced the quantity of impacted soils and in many other cases, lowers the degree of those soils still considered contaminated.
- 3) Limited intrusive investigation since the FEIS has resulted in a better knowledge of some listed sites.

- 4) One of the key sites impacted by rail re-alignment, Aluminum Recycling, originally estimated to be a major impact, has undergone hazardous site closure by the property owner since the FEIS but still remains a listed contaminated site. This proposed project change will still create an impact to this site and will require partial re-engineering and re-construction of the remediation effort. However, the total impact will be substantially less than initially estimated.

ADDITIONAL NEW IMPACTS

Seven additional commercial properties or portions thereof are affected by the new alignment. Only four of these parcels have the potential of associated soil contamination. Any associated contamination should be restricted to that parcel and shallow. Additionally, the generally flat rail design across most of these properties minimizes contact. Following is a description of the four suspect properties and narrative on each. Investigation and remediation estimates for these sites are contained in Table 1.

- 1) **Former gas station** is located at 6225 N Market. This station has been closed for many years. A records review was inconclusive as to the disposition of former underground fuel tanks. A walk-thru of this parcel did reveal one tank fill and vent. It was found immediately adjacent to the building, which would customarily represent a heating oil tank. From what was observed, it is presumed that the former tanks have been removed but not confirmed. For the purposes of this document, it will be concluded that minimal contamination remains in place and will require cleanup prior to construction.
- 2) **Quadri Motors** is an automotive and truck sales and repair facility, located at 4618 N Market. The current structure was built in 1978. There are numerous vehicles parked on the property presumed to be for sale as well as parking for repaired vehicles. There are fenced, dry storage structures located around the building. Although there was no intrusive investigation of this parcel, there is by the nature of the business, the potential to have had petroleum or other chemical spills over the years. A majority of the remaining parcel is paved. This structure is connected to the city sewer system and most spills would be presumed to have been contained within the city system.
- 3) **Mayfield's Transmission Repair**, located at 3550 N Market is a potential contamination source. This facility has been operational for many years and the potential contamination source would be on-site disposal of petroleum products and poor housekeeping. Potential for contamination is low to moderate.

- 4) **The former Shell Gas Mart**, located at 2924 N Market. This parcel was identified in the original EIS but found to be only a partial take, not involving underground tanks. No dollar amount for investigation or remediation was assigned. It was built in 1965 as a combination gas station / car wash. Records show the three permitted underground fuel storage tanks were removed in 2004. The removal report confirms that minimal contamination was encountered and that it was removed during the tank removal. This site has since been purchased by WSDOT and demolished. No contamination was found.

TABLE 1

Estimated Increases for Potentially Contaminated Sites

Site Identification	Identified or Suspect Contaminant	Affected Media	\$\$ Investigation & Remediation Estimate
Former Gas Station	Petroleum	Soil	10,000
Quadri Motors 4618 N Market	Petroleum	Soil	10,000
Mayfield's Transmission and Automotive Repair 3556 N Market	Petroleum	Soil	10,000
Shell Gas & Car Wash 2924 N Market (full take)	Petroleum	Soil	0
TOTAL			\$30,000

IMPACT REDUCTIONS

There are three properties where the re- design substantially decreases the estimated FEIS impacts. This section will discuss those sites determined to have a substantially reduced impact as compared to that listed in the FEIS. In 2008, a WSDOT, Cost Estimate Valuation Process (CVEP) adjusted the real associated costs since the publishing of the FEIS. The results of both are shown in **Table 2**.

- 1) **Aluminum Recycling** is on a leased portion of BNSF property. It is the site of a former aluminum dross recycler. This is a listed hazardous site and a remediation project was undertaken by BN to cap this site. As a part of the BN project, WSDOT made an agreement to allow for a portion of this site to be reused as a rail spur, serving Koch Materials. The project took this into account during remediation and the project was completed. The current rail and roadway alignments require a small shift of the spur alignment to work. Since remediation has been completed and will only require a small change, most of the original costs can be avoided.
- 2) **Burlington Northern, Property Sequence 991** is that portion of the former rail yard to the south of Francis Ave. Following a limited intrusive investigation the approximate levels of contamination described in the FEIS were confirmed. This project was originally profiled to be between twenty-five and thirty feet sub-grade. The new profile raises the roadway to an approximate average of eight feet above grade. Not impacting much of the contamination and knowing where some of the more impacted soils lay, has allowed this project to avoid many of the worst areas. Also, the quantity of soil cuts vs. fills in the new profiles, as well as regulatory changes in petroleum cleanup levels allow for the on-site reuse of much more of the material.
- 3) **Koch Materials** is a liquid asphalt distributor / tank farm, leasing a portion of the BNSF property south of Wellesley Ave. The original FEIS alignment took most of this site. A re-evaluation of the FEIS in The new alignment will force relocation of two of the tanks. This minimizes direct impacts.
 - * The 2008 CVEP investigation and remediation estimate reflected a cost savings opportunity with only a partial take of the Koch Materials parcel.

Table 2
Re alignment/ Profile Change -Estimated Impact Reductions

Site Identification	Identified or Suspect Contaminant	Affected Media	FEIS estimate (1995)	Investigation & Remediation estimate (2008 CVEP)	Re-evaluation estimate (2011)
Aluminum Recycling	1. Metals 2. Salts	Soil Groundwater	4,715,000	7,247,000	3,215,000
BN/SF Property Sequence 991	Petroleum Paint Asbestos Metals	Soil Groundwater	6,357,500	9,771,000	3,600,000
*Koch Materials	Petroleum PAH Phenoloics Metals	Soil Groundwater	11,770,000	6,322,000	1,480,000
Totals			\$ 22,842,500	\$ 23,340,000	\$ 8,295,000

Conclusion

With this proposed re-design, the fill sections on this project section *Francis Interchange to the Spokane River* now outweigh the cut sections. These changes equate to an approximate net decrease of 2.5 million yds³ of soil that will no longer be disturbed. Only an estimated 1.35 million yds³ will be required to be excavated within this section and much of that will now be able to be re-used on-site as fill.

Only an estimated 108,000 yds³ will require disposal which, using a 150 % weight to volume, equates to 162,000 tons. Using today's average costs for disposal @ \$ 40 - \$ 50 per ton, including excavation and transportation, the total cost for off-site disposal is estimated to be between \$ 6,480,000 and \$8,100,000.

Although hazardous materials impacts and required cleanup remain, the total reductions in overall contact and associated disposals result in a major overall decrease in hazardous materials costs.